

CLAIMS

What is claimed is:

1. A quick-pin blade tensioning device for a band saw including an upper band wheel operationally engaging a band saw blade, comprising:
 - a sliding tension bracket for operationally engaging with the upper band wheel and an upper arm of the band saw;
 - a lifting shoe operationally coupled with the sliding tension bracket and being received within the upper arm, the lifting shoe for causing the sliding tension bracket to slide within the upper arm;
 - a pin operationally coupled with the lifting shoe, the pin for moving the lifting shoe within the upper arm;
 - a tension crank including a first end and a second end, the first end coupled with the pin, the tension crank being received within the upper arm, the tension crank for moving the pin;
 - a tension handle having a first position and a second position, the tension handle coupled with the second end of the tension crank, the tension handle for imparting a rotation to the tension crank causing the pin to move,
 - wherein the tension handle when in the first position releases tension to the band saw blade and applies tension from the band saw blade when in the second position.
2. The quick-pin blade tensioning device of claim 1, wherein the pin is removable from the first end of the tension crank.
3. The quick-pin blade tensioning device of claim 1, wherein the band saw further includes a standard blade tensioning device.
4. The quick-pin blade tensioning device of claim 1, wherein the lifting shoe is in direct engagement with the sliding tension bracket.

5. The quick-pin blade tensioning device of claim 1, wherein the tension handle is removable from the tension crank.
6. The quick-pin blade tensioning device of claim 1, wherein the tension handle is further enabled with a plurality of positions.
7. The quick-pin blade tensioning device of claim 1, wherein the amount of tension applied to the band saw blade may vary.

8. A band saw including an upper band wheel operationally engaging a band saw blade, comprising:
 - a quick-pin blade tensioning device operationally coupled with the upper band wheel of the band saw, the quick-pin blade tensioning device further comprising,
 - a sliding tension bracket for operationally engaging with an upper arm of the band saw and the upper band wheel;
 - a lifting shoe coupled with the sliding tension bracket and being received within the upper arm, the lifting shoe for causing the sliding tension bracket to slide within the upper arm;
 - a pin operationally coupled with the lifting shoe, the pin for moving the lifting shoe within the upper arm;
 - a tension crank including a first end and a second end, the first end coupled with the pin, the tension crank being received within the upper arm, the tension crank for moving the pin;
 - a tension handle having a first position and a second position, the tension handle coupled with the second end of the tension crank, the tension handle for imparting a rotation to the tension crank causing the pin to move,
 - wherein the tension handle when in the first position releases tension to the band saw blade and applies tension from the band saw blade when in the second position.
9. The band saw of claim 8, wherein the pin is removable from the first end of the tension crank.
10. The band saw of claim 8, wherein the band saw further includes a second blade tensioning device.
11. The band saw of claim 8, wherein the lifting shoe is in direct engagement with the sliding tension bracket.

12. The band saw of claim 8, wherein the tension handle is removable from the tension crank.
13. The band saw of claim 8, wherein the tension handle is further enabled with a plurality of positions.
14. The band saw of claim 8, wherein the amount of tension applied to the band saw blade may vary.

15. A quick-pin blade tensioning device for a band saw including an upper band wheel operationally engaging a band saw blade, comprising:
means for operationally engaging the upper band wheel; and
means for applying a tension to the band saw blade.
16. The quick-pin blade tensioning device of claim 15, wherein the means for operationally engaging the upper band wheel further comprises the blade tensioning device operationally coupled with the upper band wheel of the band saw, the blade tensioning device further comprising,
a sliding tension bracket for operationally engaging with an upper arm of the band saw and the upper band wheel;
a lifting shoe coupled with the sliding tension bracket and being received within the upper arm, the lifting shoe for causing the sliding tension bracket to slide within the upper arm;
a pin operationally coupled with the lifting shoe, the pin for moving the lifting shoe within the upper arm; and
a tension crank including a first end and a second end, the first end coupled with the pin, the tension crank being received within the upper arm, the tension crank for moving the pin.
17. The quick-pin blade tensioning device of claim 15, wherein the means for determining a tension applied to the band saw blade is accomplished through use of a tension handle operationally coupled with the second end of the tension crank of the means for operationally engaging the upper band wheel, the tension handle providing a first position and a second position.

18. A method for adjusting the tension of a band saw blade operationally coupled with an upper band wheel of a band saw, comprising:

positioning a quick-pin blade tensioning device comprising a sliding tension bracket, coupled to a lifting shoe engaged by a pin coupled with a tension crank, in operational contact with the upper band wheel and an upper arm of the band saw and providing a tension handle, coupled to the tension crank, for engagement by a user, followed by at least one step selected from the group consisting of;

rotating the tension handle to a first position whereby the blade tensioning device moves the upper band wheel in a first direction decreasing tension in the blade; and

rotating the tension handle to a second position whereby the blade tensioning device moves the upper band wheel in a second direction increasing tension on the blade.

19. The method of claim 18, wherein the tension handle is removable from the tension crank.

20. The method of claim 18, wherein the pin is removable from the tension crank.

21. The method of claim 18, further comprising the step of determining operation of the band saw after the tension handle has been rotated into the first or second position.